What is GHS?

- **GHS**: **G**lobally **H**armonized **S**ystem of Classification and Labeling of Chemicals
- **Purpose:** To communicate the same hazards in the same way around the world.
- **Implementation in Europe:** The current system will be changed to GHS in stages.
- **Transitional Provisions:**
  - ⇒ By 1 December 2010, **substances** must be labeled according to GHS
  - ⇒ By 1 June 2015 **mixtures** of substances must be labeled according to GHS
  - ⇒ No labels indicating both systems permitted
  - ⇒ Until 1 June 2015 the MSDS must show the classification of the chemical according to the former (European) system

Further information:

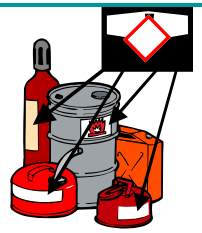
http://www.umweltbundesamt.de/chemikalien-e/ghs.htm

http://www.baua.de/cln_137/en/Topics-from-A-to-Z/Hazardous-Substances/Hazardous-Substances.html

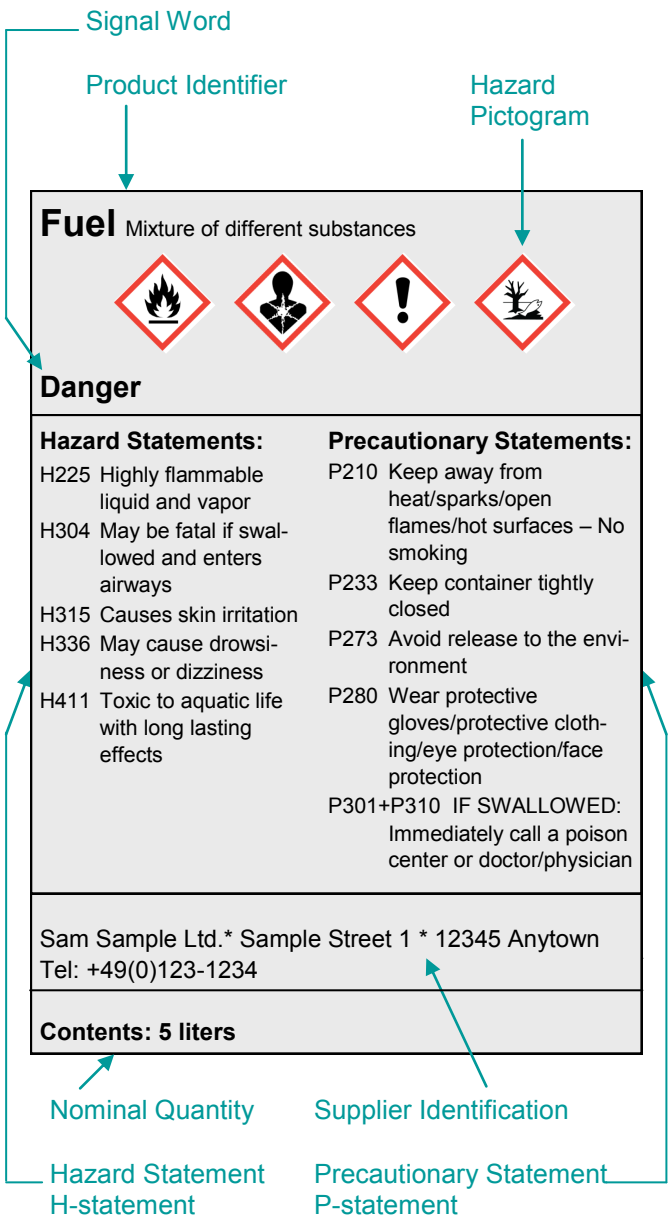
http://www.chemeurope.com/en/reach-ghs.html

http://www.dguv.de/ifa/en/gestis/stoffdb/index.jsp

http://ec.europa.eu/enterprise/sectors/chemicals/classification/index_en.htm



Example GHS Label



USAG SCHWEINFURT

DPW - ENVIRONMENTAL DIVISION

New Labeling System for Chemicals According to GHS

Contact

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Changes in Labeling

The label is intended to warn persons handling a substance or mixture about related hazards. The globally harmonized system supersedes labeling requirements according to the European system from 1 December 2010 (substances) and 1 June 2015 (mixtures of substances).

Significant changes in labeling include:

- **Hazard Pictograms:** Nine new hazard pictograms (red bordered diamonds showing black

symbols on a white background) replace the old hazard symbols, which used to be orange squares.

- **Signal Words:** Two new signal words, "DANGER" and "Warning" will replace the formerly used hazard category (e.g. toxic, harmful to health)
- **Hazard Statements:** The new hazard statements (H-statements) replace the former risk phrases (R-Phrases).
- **Precautionary Statements:** The new precautionary statements (P-statements) replace the formerly used safety phrases (S-Phrases).

A **Product Identifier**, for identifying the substance or mixture, **Supplier Identification** including name, address and telephone number and **Nominal Quantity** contained in the package will still be listed on the label.

Pictograms

	Explosive	Fire, impact, friction and heating may cause an explosion. Fire, blast or projection hazard.
	Flammable	Flammable. Liquids exposed to air create explosive mixtures. Releases flammable gases in contact with water which may ignite spontaneously.
	Oxidizing	May cause or intensify fire, oxidizer. Creates explosive mixtures combined with flammable substances..
	Compressed Gases	Heating may cause an explosion. Refrigerated gas may cause cryogenic burns or injury
	Corrosive	Corrosive to metals and burns body tissues. Causes serious eye damage.
	Toxic	Small quantities may immediately cause severe damage to health or death.
	Irritant/ Sensitizing	Causes health damage, irritation of eyes, skin and airways. Large quantities may cause death.
	Harmful to health	May cause cancer and genetic defects May damage fertility or the unborn child. Causes damage to organs and allergies.
	Dangerous to the environment	Harmful, toxic or very toxic to aquatic life, acute or with long lasting effects.

Signal Words, H- and P-Statements

Signal Words

"**DANGER**" and "**Warning**" will be used to indicate the relative level of severity of the hazard. They advise people handling this substance or mixture of substances about the potential hazard.

DANGER For serious hazards.

Warning For lower level hazard categories.

There will always be only one signal word displayed. The phrase „Warning" is superseded by the more important phrase "DANGER" when both signal words apply

Hazard statements (H-statements)

These are standard phrases assigned to a hazard class and category that describe the nature and severity of its physical, health, and environmental hazards.

Examples: **H290** *May be corrosive to metals.*
H318 *Causes serious eye damage.*
H400 *Very toxic to aquatic life.*

Precautionary statements (P-statements)

These describe in a standardized manner proposed measures to minimize or prevent adverse effects during use or disposal. There are four types of precautionary statements covering: prevention, response in cases of accidental spillage or exposure, storage, and disposal.

Examples: **P280** *Wear protective gloves.*
P301 + P330 + P331 *IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.*
P405 *Store locked up.*